

### REMARKS

Claims 1-15 are pending in the Application.

Claims 1-15 stand rejected.

The disclosure is objected to for informalities.

Applicants respectfully assert that the amendments to claim 1, 2, 6, 7, 11, and 12 in this paper are not narrowing amendments made for a reason related to the statutory requirements for a patent that will give rise to prosecution history estoppel. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 56 U.S.P.Q.2d 1865, 1870 (Fed. Cir. 2000).

Applicants express their appreciation for Examiner's availability to conduct a phone interview on 12/20/2005 with Applicants' legal representative. The Examiner's Interview Summary with a mailing date of 12/22/2005 was received and is acknowledged.

Applicants respectfully assert that all pending claims are allowable and Applicants respectfully request the Examiner to withdraw all outstanding rejections.

#### I. OBJECTIONS TO DISCLOSURE

The Examiner objects to the Specification because item 356 appears in the text but item 356 is not correctly marked in the Figures. *See* Office Action, 11/02/2005, paragraph 2. The reference to item 356 in the Specification was a typographical error and should correctly refer to item 330. Applicants have amended the Specification text to correspond to Figure 3b. No new matter was added with the correction because Applicants changed the Specification only to correct an obvious typographical error. This change was made only to bring the Specification and Figure 3b into agreement and this correction does not add new matter or otherwise affect claim scope.

## II. CLAIM AMENDMENTS

Claims 1, 2, 6, 7, 11, and 12 are amended to clarify claim language that describes inventive aspects of the claim limitations and to provide consistency between related claims. The present amendments are presented in accordance with the Examiner's request for additional clarification during the telephonic interview conducted on 12/20/2005. The claim amendments in this paper do not add new matter and do not alter the scope of the claimed subject matter.

## III. REJECTIONS UNDER 35 U.S.C. § 102(e)

Claims 1-2, 4, 6-7, 9, 11-12, and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Ganguly et al.* (U.S. Patent Publication No. 2003/0212863), hereinafter *Ganguly*.

For a claim to be anticipated under 35 U.S.C. §102, each and every claim limitation must be found within the cited prior art reference and arranged as required by the claim. M.P.E.P. §2131.

Regarding claim 1, Applicants respectfully traverse the Examiner's rejection and assert that *Ganguly* does not teach or suggest a method for providing transparency in a gateway of an IP network comprising interrogating a directory comprising proxy server protocol data specific to every end-user network account of said IP network. The references cited by the Examiner as reading on this claim language, Fig. 3, item 312, Fig. 9, item 900, ¶[0125-0126] of *Ganguly*, fail to teach or suggest the claim limitations. See Office Action from 11/02/2005, p. 4, lines 10-11. Fig. 3 in *Ganguly* illustrates components of a predicate proxy caching system, while element 312 in *Ganguly* represents a persistent storage subsystem of the cache. Fig. 9, element 900 in *Ganguly* illustrates a back-end configuration table. Both Fig. 3 and Fig. 9, along with ¶[0125-0126] in *Ganguly* thus disclose back-end elements in a proxy caching system that do not teach or suggest proxy server protocol data specific to every end-user network account of said IP network, which is front-end functionality. There is no language in *Ganguly* that teaches or suggests a directory

comprising proxy server protocol data specific to every end-user network account of said IP network, and no language that teaches or suggests interrogating such a directory.

Further regarding claim 1, *Ganguly* does not teach or suggest retrieving parameters associated with said proxy server protocol data for a first end-user in response to an access request from a client application of said first end-user. The Examiner cites Fig. 9, elements 904-914 as well as ¶[0030-0031] in *Ganguly* as teaching these claim limitations. See Office Action from 11/02/2005, p. 4, lines 12-13. Applicants respectfully traverse. The predicate indexing methods of *Ganguly* are only specific to the information contained in the client request, but do not depend on the client, i.e., end-user. Fig. 9, elements 904-914, in *Ganguly* illustrates a back-end configuration table and parameters associated with backend caching, i.e., for administrative access, that are not specific to the end-user from which the request originated. The cited passage in *Ganguly*, ¶[0030-0031], describes a summary of the predicate logic proxy caching system that "...translates a conventional query from a client into a predicate..." which is used for querying and accessing the back-end cache of a proxy server. *Ganguly* teaches exclusively back-end proxy caching operations and methods that are not specific to a certain end-user or client, and does not teach or suggest method steps performed for a first end-user or in response to a request from a client application of said first end-user. The claim language clearly refers to front-end functionality that is specific to individual end-users. For at least this reason, the method of the present invention is patentably distinct from the subject matter disclosed in *Ganguly*. Thus, *Ganguly* does not disclose all of the limitations of claim 1 and thus *Ganguly* does not anticipate claim 1.

Regarding claim 2, the Examiner cites *Ganguly* (¶[0014]; ¶[0030-0031]; Fig. 4, element 404; Fig. 7, element 700) as teaching the method step of creating, in said gateway of said IP network, a directory including entries specific to every end-user network account on said IP network. See Office Action from 11/02/2005, p. 4, lines 20-22. Applicants respectfully traverse. As mentioned previously in support of claim 1, *Ganguly* does not teach or suggest a directory including entries specific to

every end-user network account on said IP network. In *Ganguly*, ¶[0014] discusses storage schemas on LDAP directory servers, but does not teach or suggest a directory specific to every end-user network account. In *Ganguly*, Fig. 4, element 404 represents the predicate proxy server, which "arranges a predicate in normal form..., generates requests to directory server 402, and caches response data with indexing by the predicate used to find the data." *Ganguly*, ¶[0049], emphasis added. In contrast to the front-end methods of the present invention, in *Ganguly*, Fig. 7, element 700 represents a proxy cache table, that is back-end cache data indexed by predicates. *Ganguly*, ¶[0094]. There is no language in *Ganguly* referencing a directory including entries specific to every end-user network account on said IP network and *Ganguly* does not teach or suggest creating such a directory in the gateway, as in claim 2. Thus, *Ganguly* does not disclose all of the limitations of claim 2 and thus *Ganguly* does not anticipate claim 2.

Regarding claim 4, the Examiner cites *Ganguly* as teaching the method steps in this claim. In particular, *Ganguly* ¶[0005] is cited teaching: determining a protocol said client application is currently using. See Office Action from 11/02/2005, p. 5, line 6. Applicants respectfully traverse. *Ganguly* does not teach or suggest determining a protocol said client application is currently using. In contrast, *Ganguly* clearly states that "...requests issued from the client and proxy server to the server conform to a conventional protocol, such as the lightweight directory access protocol (LDAP)." *Ganguly* ¶[0005], emphasis added, and also that "[i]n this document, the conventional protocol used to issue requests from a client is ... (LDAP)...", *Ganguly*, ¶[0010]. As a result of the foregoing, Applicants assert that *Ganguly* does not determine a protocol used by the client application, as do the method steps in claim 4, but instead merely conforms to a pre-existing conventional protocol.

Further regarding claim 4, the Examiner asserts that *Ganguly* teaches interrogating said directory at an entry corresponding to said first end-user; retrieving parameters associated with said request; and executing said protocol in accordance with said parameters associated with said protocol. The Examiner cites ¶[0039-0041]; ¶[0049]; ¶[0126-0127] as disclosing these claim limitations. Applicants

respectfully traverse. *Ganguly* discloses at ¶[0039] receiving a request from a client by a proxy server and the predicate proxy core attempting to fulfill the request. Additionally, *Ganguly* discloses that if the request cannot be fulfilled by the predicate proxy system, the request is forwarded to the remote server, whose response is transmitted through the proxy server back to the client. *Ganguly*, ¶[0039]. However, *Ganguly* does not teach "interrogating said directory at an entry corresponding to said first end-user," as in claim 4. As argued previously, there is no language in *Ganguly* referring to client (or end-user) specific functionality, such as interrogating a directory at an entry corresponding to a first end-user. The method of *Ganguly* is silent regarding front-end specificity (such as a determining a protocol or parameters associated with a protocol) for a given end-user; to the contrary, *Ganguly* relies on a single, defined protocol stating that "...the client issues a query via the LDAP protocol.... The request conforms to the LDAP protocol...." *Ganguly*, ¶[0040]. Thus *Ganguly* does not teach or suggest retrieving parameters associated with said protocol; and executing said protocol in accordance with said parameters associated with said protocol.

Applicants assert that the Examiner has not addressed the claim language for the fifth step of claim 4, and has cited "parameters associated with said request" instead of "parameters associated with said protocol." For this reason alone, the Examiner has failed to prove a *prima facie* case of anticipation in rejecting claim 4.

As a result of the foregoing, *Ganguly* does not disclose all of the limitations of claim 4 and thus *Ganguly* does not anticipate claim 4.

Regarding claims 9 and 14, these claims are allowable for at least the reasoning presented above in support of claim 4.

Regarding claims 6 and 11, these claims are allowable for at least the reasoning presented above in support of claim 1.

Regarding claims 7 and 12, these claims are allowable for at least the reasoning presented above in support of claim 2.

#### IV. REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 3, 8, and 13 stand rejected as obvious over *Ganguly* in view of *Aravamudan et al.* (U.S. Patent No. 6,301,609), hereinafter *Aravamudan*. Claims 5, 10, and 15 stand rejected as obvious over *Ganguly* in view of *Banavar et al.* (U.S. Patent No. 6,662,206), hereinafter *Banavar*.

The basic test for nonobvious subject matter is whether the differences between the subject matter and the prior art are such that the claimed subject matter as a whole would not have been obvious to a person having ordinary skill in the art to which the subject matter pertains. The United States Supreme Court in *Graham v. John Deere & Co.*, 383 U.S. 1 (1966) set forth the factual inquiries which must be considered in applying the statutory test: (1) a determination of the scope and contents of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; and (3) resolving the level of ordinary skill in the pertinent art.

#### Determining Scope and Content of Prior Art

In determining the scope and content of the prior art, the Examiner must first consider the nature of the problem on which the inventor was working. Once this has been established, the Examiner must select, for purposes of comparing and contrasting with the claims at issue, prior art references which are reasonably pertinent to that problem (the inventor's field of endeavor). See *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc.*, 30 U.S.P.Q.2d 1377, 1379 (Fed. Cir. 1994). In selecting references, hindsight must be avoided at all costs.

The present invention relates to systems for providing transparency in an IP network gateway. Many prior art systems failed to meet an important concern of network administrators—that an end-user should not be affected by the solutions adopted to administrate and run a network. See Specification, page 12, lines 21-23. Many prior art systems require that a client be "socksified" for communication between the client and a proxy server. See Specification, page 13, lines 1-3. In an embodiment of the present invention, such requirements are reduced because the

client communicates through an agent. *See* Figure 3(b), item 315. The present invention relates to method steps between the end-user, embodied as a network client, and predicate proxy caching system; the functionality of the present invention thus relates primarily to front-end operations and to a lesser extent to back-end operations of retrieving and relaying data.

In contrast, *Ganguly* relates to a method for interpreting and classifying client requests that may be serviced by a proxy cache server. The method is based on a predicate formed by the query from the client. *Ganguly* ¶[0017]. The method encompasses servicing requests from a persistent predicate cache memory and managing the predicate cache memory using predicate logic. *Ganguly* ¶[0055-0067]. The method also comprises tables for managing back-end transactions and storage of data items in the predicate cache memory. *Ganguly* ¶[0094-0099]

*Aravamudan* relates to instant messaging systems and the unification of such systems that may contain otherwise non-compatible features and protocols. *See Aravamudan*, col. 2, lines 25-28. An instant messaging service provider may provide a data converter utilizing a gateway. *See Aravamudan*, col. 3, lines 52-55. For example, voice traffic may be converted to an IP format in a gateway. *See Aravamudan*, col. 4, lines 6-7.

*Banavar* relates to a method that may be practiced with messaging middleware for solving the problem of recovering from an interruption in a publisher/subscriber node pair. *Banavar*, col. 1 lines 20-57. *Banavar* discloses a method for replacing the full content of the missing subscription data with a condensed, but interpretable summary of events missed during the interruption. *Banavar*, col. 2, lines 28-58. *Banavar* discloses detecting lost connections of sockets for the purpose of maintaining the subscriber's state despite the interruption in access. *Banavar* col. 8, lines 1-12.

#### Differences Between Prior Art and Claims

The second step within the test described in *Graham* is to ascertain the differences between the cited prior art and the claims at issue. A *prima facie* showing of obviousness requires the Examiner to establish that the prior art references teach or suggest, either alone or in combination, all of the limitations of the claimed invention. The showings must be clear and particular. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Regarding claim 3, *Ganguly* teaches a method for interpreting a specific request and generating a predicate from the logical content of the request. *Ganguly*, ¶[0043]. The predicate logic table in *Ganguly* does not store information specific to end-users or client-specific protocols. *Ganguly*, Fig. 7. Therefore, *Ganguly* does not teach or suggest the claim language in claim 3 of "updating said entries of said end-users comprising dynamic parameters whenever said parameters are changing while connected." The cited portion of *Aravamudan* discloses an instant message server polling a client to determine whether the client is inactive. *See Aravamudan*, col. 8, lines 1-4 & 10-14. If there is inactivity by an instant messaging user, the CSP (Communications Services Platform) database is updated. *See Aravamudan*, col. 8, lines 1-4. There is no evidence that *Aravamudan* teaches or suggests updating, in said gateway of said network, the directory of said end users, as in claim 3. Applicants assert that the method of *Aravamudan* would not be operable if the updates would be performed in said gateway of said network. Therefore, neither *Ganguly* nor *Aravamudan*, taken singly or in combination, teaches or suggests the limitations in claim 3. Thus the Examiner has not established a *prima facie* case of obviousness in rejecting claim 3.

Regarding claims 8 and 13, the Examiner has failed to establish a *prima facie* case of obviousness in rejecting these claims for at least the reasons presented above in support of claim 3.

Regarding claim 5, *Banavar* teaches a method for detecting interruption in access to a subscriber/publisher pair node transmitting a messaging stream. *Banavar*, col. 8, lines 1-12. However, *Banavar* does not teach or suggest "informing said end-user of said client application that a server application is unavailable if a link to said



application server is not established," as in claim 5. In fact, the method of *Banavar* would teach away from such a method step in several aspects. *Banavar* does not teach a method of network access that is based on client requests for data from an application server, but for a continuous messaging stream between a subscriber/publisher pair node. Also, the method of *Banavar* fundamentally seeks to eliminate the end-user's perception of interruptions, and so would teach away from informing the end-user that a server application is unavailable. Further, the method of *Banavar* is only operable in a state where a link to the application server is always established; thus *Banavar* is not operable if a link to said application server is not established, as in claim 5. Therefore, neither *Ganguly* nor *Banavar*, taken singly or in combination, teaches or suggests the limitations in claim 5. Thus the Examiner has not established a *prima facie* case of obviousness in rejecting claim 5.

Regarding claims 10 and 15, the Examiner has failed to establish a *prima facie* case of obviousness in rejecting these claims for at least the reasons presented above in support of claim 5.

In summary, the Examiner has not established a *prima facie* case of obviousness that every limitation of claims 3, 8, and 13 are disclosed in *Ganguly* and *Aravamudan*, taken alone or in combination. Neither has the Examiner established a *prima facie* case of obviousness that every limitation of claims 5, 10, and 15 are disclosed in *Ganguly* and *Banavar*, taken alone or in combination. Rather than make a clear and particular showing, the Examiner makes broad and conclusory statements, which are not evidence. Based on the foregoing arguments, Applicants respectfully traverse the Examiner's interpretation of the cited references. Applicants respectfully assert that claims 3, 8, and 13 are allowable over *Ganguly* in view of *Aravamudan* and over the prior art, and that claims 5, 10, and 15 are allowable over *Ganguly* in view of *Banavar* and over the prior art.

### Ordinary Skill and Relevant Art

In resolving the level of ordinary skill of the pertinent art, as required by the third step in *Graham*, the Examiner must step backward in time and into the shoes worn by a person of ordinary skill when the invention was unknown and just before it was made. The hypothetical person skilled in the art can summarily be described as one who thinks along lines of conventional wisdom in the art and neither one who undertakes to innovate nor one who has the benefit of hindsight. Thus, neither an examiner, nor a judge, nor a genius in the art at hand, nor even the inventor is such a person skilled in the art.

In order to establish a *prima facie* case of obviousness, it is necessary for the Examiner to present evidence, preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge that one having ordinary skill in the art would have been led to modify or combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300, 1301 (Bd. Pat. App. & Int. 1993); *Ashland Oil, Inc. v. Delta Resins and Refractories, Inc.*, 776 F.2d 281 (Fed. Cir. 1985). The motivation or suggestion to modify or combine references must come from one of three possible sources: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q. 2d 1453, 1458 (Fed. Cir. 1998). The showings must be clear and particular. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teachings of multiple references, standing alone, are not evidence. *Id.*

The legal conclusion of obviousness must have a correct factual basis. See *Graham v. John Deere & Co.*, 383 U.S. 1 (1966); *In re Rouffet*, 47 USPQ2d 1453, 1455 (Fed. Cir. 1998). Where the legal conclusion is not supported by facts, it cannot stand. *Id.* A rejection based on §103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The patentability of an invention is not to be viewed with hindsight or "viewed after the

event." *Goodyear Company v. Ray O Vac Company*, 321 U.S. 275, 279 (1944). The proper inquiry is whether modifying or bringing them together was obvious and not, whether one of ordinary skill, having the invention before him, would find it obvious through hindsight to construct the invention. Accordingly, an Examiner cannot establish obviousness by locating references which describe various aspects of Applicant's invention without also providing evidence of the motivating force which would compel one skilled in the art to do what the patent applicant has done.

Regarding the combination of *Ganguly* with *Aravamudan* used in rejecting claims 3, 8, and 13, the Examiner's stated motivation for combining these references is "because teaching of *Aravamudan* to allow user connection status would improve the interface of *Ganguly* by maintain the connection status of end user devices and notify said user of the current system status (*Aravamudan*, see for example, Col. 7, line 60 – Col. 8, line 5)." See Office Action from 11/02/2005, p. 6, lines 17-21. Applicants respectfully traverse and assert that the motivation supplied "to improve the interface of *Ganguly*" is a subjective opinion by the Examiner and not supported by any facts or objective evidence in the references. The cited passage in *Aravamudan* teaches a timeout protocol in an instant messaging environment, which implicitly assumes that constant activity is required for maintaining a connection. There is no objective evidence that such a requirement of constant activity is present in the method of *Ganguly*. There is no indication that the method of *Ganguly* is not operable during extended periods of inactivity by the end-user. Also, *Ganguly* clearly refers to the Internet as an embodiment of the claimed IP network. *Ganguly*, ¶[0003]. The Internet connection in itself between an end-user and an ISP, which may provide its own connection management functions, would therefore not necessarily be improved by the method of *Aravamudan*. The language in claim 3, by "disabling entries for those of said end-users that disconnect" and "enabling entries for those of said end-users that connect", provides for a unique management of transparent proxy server protocols in a gateway, whose novelty lies in not requiring notifying the end-user. This connection aspect of the present invention would also not be improved by a combination of *Ganguly* and *Aravamudan*. Applicants respectfully assert that because the Examiner has failed to provide sufficient motivation to combine *Ganguly*

with *Aravamudan* in rejecting claims 3, 8, and 13, that the Examiner has failed to establish a *prima facie* case of obviousness against these claims.

Regarding the combination of *Ganguly* with *Banavar* used in rejecting claims 5, 10, and 15, the Examiner's stated motivation for combining these references is "because teaching of Banavar to allow the step of informing said end-user of said client application that a server application is unavailable if a link to said application server is not established would improve the failure analysis for Ganguly's system by monitoring the link in a real time basis to detect any potential link failures." See Office Action from 11/02/2005, p. 7, lines 8-13. Applicants respectfully traverse and assert that the motivation supplied "to improve the failure analysis of Ganguly" is a subjective opinion by the Examiner and not supported by any facts or objective evidence in the references. The cited passages in *Banavar* teaches sustained message streaming in a subscriber/publisher node pair configuration, which does require real-time monitoring of the connection. There is no objective evidence that such a requirement of real-time monitoring is present in the method of *Ganguly*. There is no indication that the method of *Ganguly* is not operable during extended periods of inactivity by the end-user. The large number of elements in the predicate proxy cache of *Ganguly* would therefore not be improved by the real-time monitoring of link status, as in the method of *Aravamudan*, but rather be inhibited by the resulting large number of meaningless notifications. The language in claim 5, by "informing said end-user of said client application that a server application is unavailable if a link to said application server is not established", provides for a unique relaying of status information in an otherwise transparent proxy server protocol. This relaying aspect of the present invention would also not be improved by the combination of *Ganguly* and *Banavar*, since the method of the present invention is inherently transaction-based, rather than relying on a continuous subscriber/publisher data stream. Applicants respectfully assert that because the Examiner has failed to provide sufficient motivation to combine *Ganguly* with *Banavar* in rejecting claims 5, 10, and 15, that the Examiner has failed to establish a *prima facie* case of obviousness against these claims.

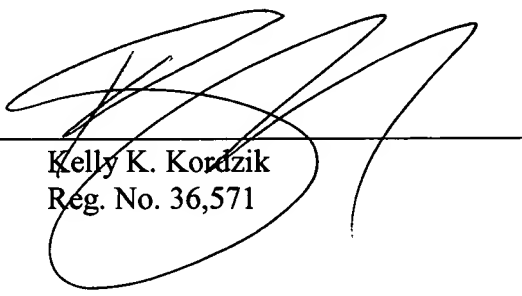
V. CONCLUSION

In consideration of the foregoing, Applicants assert that all remaining claims are in condition for allowance. Applicants respectfully request an early allowance of such claims. Applicants respectfully request that the Examiner call Applicants' attorney at the below-listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully submitted,

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